

# Birmingham City University

## Refurbishment



### Project name:

Birmingham City University

### Location:

Birmingham

### Value:

£210,000

### Services:

Architecture  
Building Services (M&E)  
Structural & Civil Engineering  
Interior Design  
CDMC

## The Brief

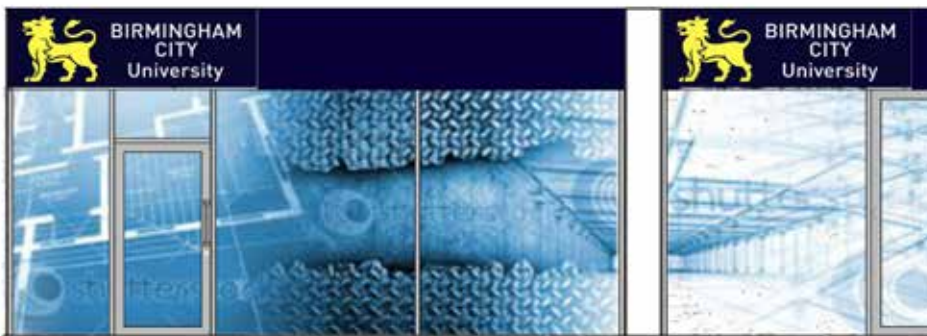
One was commissioned to design, manage and deliver a number of refurbishment projects for Birmingham City University across its city-wide campus to improve teaching facilities and achieve better utilisation of space. From provision of a new recording studio to delivering improved lecture and seminar space, the projects required a building services-led approach to create efficient design solutions and provide infrastructure that would work with the existing building fabric.



# Project Overview

Works at the University's Baker Building involved converting an existing classroom into a state-of-the-art recording studio and broadcasting suite. Due to the sensitive equipment that would be used, the scheme had specific acoustic and cooling requirements. Specification of acoustic partitions and screens and a considered approach to the mechanical ventilation systems therefore ensured high levels of sound insulation were achieved along with a comfortable working environment for students and teaching staff.

As part of ongoing works, One was appointed to design, manage and deliver the refurbishment and conversion of several office suites within Birmingham's Millennium Point campus into new seminar and lecture spaces. Requiring space planning and a considered approach to heating, lighting and ventilation, an integrated design solution was required to maximise space and ensure comfort levels could be maintained to meet the occupancy levels. Inefficient air conditioning units were removed and an air handling unit installed in the external plant area, utilising the existing roof space. Ductwork was routed through existing service risers, with air to be extracted by a fan located at a high level within the service corridor to remove stale air. An air source heat pump was also installed to provide adequate heating and cooling and maintain comfort levels in the lecture and seminar rooms.



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*I like using the 'one-stop-shop', gaining the benefits of employing all the consultant disciplines from one organisation with a single point of contact.*”

Fred Coke, Assistant Director of Estates at Birmingham City University



## The Benefits

- **Reduced design time through a robust practical concept** – By taking an analytical approach to working with the existing building fabric, the incorporation of building services systems became an integral part of the space planning for the project. With building services and architecture working together, the routing of ductwork and other services infrastructure through the existing building fabric could be incorporated into the initial design and retained through to delivery.
- **Intelligent building services systems to adapt to fluctuating occupancy levels** - Benefitting from specific control systems to optimise functionality, the air handling unit can adapt to achieve the highest level of performance to meet the occupancy levels within the building. This increases energy efficiency, delivering a more sustainable and cost-effective solution.
- **An integrated design team to reduce cost and client risk** – Despite a tight timeframe and the need for the works to be completed for the start of a new term, One's role as lead designer and project manager offered the client peace of mind. Managing the co-ordination of all stakeholders - including the landlord, the University and the contractor - ensured smooth delivery of the refurbishment works from inception through to completion.

